

## IN THE CLAIMS

All pending claims and their present status are reproduced below. Please add new claim 79 as indicated herein. Please amend claim 40 as indicated herein.

1-39. (Canceled)

40. (Currently Amended) A network monitoring system, comprising:

a flow processor coupled to ~~[[the]]~~ a media module, the flow processor classifying the collected data as a priority flow or a non-priority flow and collecting data associated with traffic on a network segment;

a capture buffer coupled to the flow processor, the capture buffer including a priority queue and a non-priority queue;

an allocation module coupled to the flow processor and the capture buffer, responsive to the flow processor classifying the collected data as a priority flow, the ~~buffer~~ allocation module storing the collected data in the priority queue and responsive to the flow processor classifying the collected data as a non-priority flow, the allocation module storing the collected data in the non-priority buffer, wherein the allocation module dynamically modifies a size of the priority queue responsive to classification of collected data as a priority flow by the flow processor.

41. (Previously Presented) The network monitoring system of claim 40, wherein the allocation module dynamically decreases a size of the non-priority queue and increases a size of the priority queue responsive to classification of collected data as a priority flow.

42. (Currently Amended) The network monitoring system of claim 40, wherein the ~~buffer~~ allocation module determines a number of priority flows and increases a size of the priority queue as the number of priority flows increases.
43. (Previously Presented) The network monitoring system of claim 42, wherein the allocation module reallocates space from the non-priority queue to the priority queue to increase the size of the priority buffer.
44. (Previously Presented) The network monitoring system of claim 40, wherein the allocation module dynamically decreases a size of the priority queue and increases a size of the non-priority queue responsive to classification of collected data as a non-priority flow.
45. (Previously Presented) The network monitoring system of claim 44, wherein the allocation module reallocates space from the priority queue to the non-priority queue to increase the size of the non-priority buffer.
46. (Previously Presented) The network monitoring system of claim 40, wherein the flow processor monitors the average size of the priority queue and, responsive to the average size of the priority queue exceeding a threshold reclassifying data in the priority queue as a non-priority flow.
47. (Previously Presented) The network monitoring system of claim 40, wherein the flow processor includes a priority filter including one or more data attributes associated with the priority flow.
48. (Previously Presented) The network monitoring system of claim 40, further comprising an expert system coupled to the flow processor and the capture buffer, the expert

system regulating data transmission from the capture buffer responsive to classification by the flow processor.

49. (Previously Presented) The network monitoring system of claim 48, wherein regulating data transmission from the capture buffer responsive to classification by the flow processor comprises:

transmitting data from the priority queue before transmitting data from the non-priority queue.

50. (Previously Presented) The network monitoring system of claim 40, wherein the flow processor classifies the collected data as the priority flow responsive to the flow processor determining the collected data is associated with a priority application type.

51. (Previously Presented) The network monitoring system of claim 40, wherein the flow processor classifies the collected data as a priority flow or a non-priority flow by analyzing fields included in one or more packets included in the collected data.

52. (Previously Presented) The network monitoring system of claim 51, wherein the fields included in one or more packets comprise: a prepended descriptor, a data link control header, a level 3 header or one or more higher-level headers

53. (Previously Presented) The network monitoring system of claim 40, wherein the flow processor further modifies a data filter associated with the flow processor responsive to classifying the collected data as a priority flow or a non-priority flow and collecting data associated with traffic on a network segment.

54. (Previously Presented) The network monitoring system of claim 40, wherein the allocation module further associates a timestamp indicating when the collected data was received by the flow processor with the collected data.

55. (Previously Presented) The network monitoring system of claim 54, wherein the allocation module receives the timestamp from a system external to the network monitoring system.

56. (Previously Presented) A method for monitoring network traffic comprising:

capturing data from a network segment;

partitioning a buffer into a priority queue and a non-priority queue;

associating the captured data with a priority flow or a non-priority flow;

responsive to associating the captured data with a priority flow, storing the captured data in the priority buffer and dynamically modifying a storage capacity of the priority buffer;

responsive to associating the captured data with a non-priority flow, storing the captured data in the non-priority queue and dynamically modifying a storage capacity of the non-priority buffer.

57. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the priority queue comprises:

reallocating storage capacity from the non-priority queue to the priority queue.

58. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the non-priority queue comprises:

reallocating storage capacity from the priority queue to the non-priority queue.

59. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining a current amount of captured data associated with the priority flow;

comparing the current amount of captured data associated with the priority flow to a threshold value; and

responsive to the current amount of captured data associated with the priority flow exceeding the threshold value, increasing the capacity of the priority queue.

60. (Previously Presented) The method of claim 56, wherein associating the captured data with the priority flow or the non-priority flow comprises:

identifying a packet included in the captured data;

analyzing one or more fields of the packet; and

responsive to the analysis of the one or more fields of the packet, classifying the packet as a priority flow or a non-priority flow.

61. (Previously Presented) The method of claim 60, wherein the one or more fields of the packet comprise: a prepended descriptor, a data link control header, a level 3 header or one or more higher-level headers.

62. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the non-priority queue comprises:

determining a current amount of captured data associated with the non-priority flow;

comparing the current amount of captured data associated with the non-priority flow to a threshold value; and

responsive to the current amount of captured data associated with the non-priority flow exceeding the threshold value, increasing the capacity of the non-priority queue.

63. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining an average amount of data in the priority queue;

determining a current amount of data in the priority queue; and

responsive to the current amount of data in the priority queue exceeding the average amount of data in the priority queue, reclassifying data in the priority queue as a non-priority flow.

64. (Previously Presented) The method of claim 56, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining an average amount of data in the priority queue;

comparing the average amount of data in the priority queue to a threshold; and

responsive to the current amount of data in the priority queue exceeding the threshold, reclassifying data in the priority queue as a non-priority flow.

65. (Previously Presented) The method of claim 56, wherein associating the captured data with the priority flow or the non-priority flow comprises:

determining whether the data includes one or more attributes associated with the priority flow.

66. (Previously Presented) The method of claim 56, further comprising:

transmitting data from the priority queue before transmitting data from the non-priority queue.

67. (Previously Presented) The method of claim 56, further comprising:

associating a timestamp with the collected data, wherein the timestamp is received from an external system.

68. (Previously Presented) A computer program product comprising a computer-readable medium having computer program instructions and data encoded thereon, the computer program instructions for executing the steps of:

capturing data from a network segment;

partitioning a buffer into a priority queue and a non-priority queue;

associating the captured data with a priority flow or a non-priority flow;

responsive to associating the captured data with a priority flow, storing the captured data in the priority buffer and dynamically modifying a storage capacity of the priority buffer;

responsive to associating the captured data with a non-priority flow, storing the captured data in the non-priority queue and dynamically modifying a storage capacity of the non-priority buffer.

69. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the priority queue comprises:

reallocating storage capacity from the non-priority queue to the priority queue.

70. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the non-priority queue comprises:

reallocating storage capacity from the priority queue to the non-priority queue.

71. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining a current amount of captured data associated with the priority flow;

comparing the current amount of captured data associated with the priority flow to a threshold value; and

responsive to the current amount of captured data associated with the priority flow exceeding the threshold value, increasing the capacity of the priority queue.

72. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the non-priority queue comprises:

determining a current amount of captured data associated with the non-priority flow;

comparing the current amount of captured data associated with the non-priority flow to a threshold value; and

responsive to the current amount of captured data associated with the non-priority flow exceeding the threshold value, increasing the capacity of the non-priority queue.

73. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining an average amount of data in the priority queue;

determining a current amount of data in the priority queue; and



responsive to the current amount of data in the priority queue exceeding the average amount of data in the priority queue, reclassifying data in the priority queue as a non-priority flow.

74. (Previously Presented) The computer program product of claim 68, wherein dynamically modifying the storage capacity of the priority queue comprises:

determining an average amount of data in the priority queue;

comparing the average amount of data in the priority queue to a threshold; and

responsive to the current amount of data in the priority queue exceeding the threshold, reclassifying data in the priority queue as a non-priority flow.

75. (Previously Presented) The computer program product of claim 68, wherein associating the captured data with the priority flow or the non-priority flow comprises:

determining whether the data includes one or more attributes associated with the priority flow.

76. (Previously Presented) The computer program product of claim 68, further comprising:

transmitting data from the priority queue before transmitting data from the non-priority queue.

77. (Previously Presented) A method for monitoring network traffic comprising:

capturing data from a network segment;

partitioning a buffer into a priority queue and a non-priority queue;

associating the captured data with a priority flow or a non-priority flow;

responsive to associating the captured data with a priority flow, comparing the captured data to a priority trigger; and

responsive to the captured data matching the priority trigger, generating an alarm notifying a user of the priority trigger.

78. (Previously Presented) The method of claim 77, further comprising:

responsive to associating the captured data with a non-priority flow, comparing the captured data to a non-priority trigger; and

responsive to the captured data matching the priority trigger, generating an alarm notifying a user of the non-priority trigger.

79. (New) A network application monitoring system, comprising:

(a) at least one media module coupled to an associated network segment on which the network application is running, each media module for monitoring and collecting data relating to traffic on the associated network segment corresponding to the network application and for analyzing, responsive to a trigger condition, the collected data for traffic information, wherein each media module is tailored for network analysis and is configurable to a monitoring mode or a focus mode to monitor and collect data, each media module including a flow processor classifying the collected data as a priority flow or a non-priority flow and collecting data associated with traffic on the associated network segment; and

(b) an application server module coupled to the at least one media module for receiving the collected data and the analyzed data and analyzing the collected data and the analyzed data for improving the performance of the network application, for configuring the trigger condition, for transmitting the trigger condition to the at least one media module, the

application server module associating a user with the collected data and the analyzed data and generating a user specific log file including the collected data, the analyzed data and the associated user.